

## AMENDMENTS TO THE SPECIFICATION

*Please amend the paragraphs beginning at page 1, line 9, through page 7, line 15 as follows:*

A1 Recently, easy handling of a color image has been attained even in ordinary offices, as well as in offices of special fields, such as computer-graphic designing, when popularized are electronic apparatuses on a basis of color images. When a color image produced by a personal computer (PC) or digital still camera is transferred by electronic mail (E-mail), so that the color image is stored in a recording medium such as a hard disk, a floppy disk, or a recording medium of a digital still camera (for example, memory stick ® or smart media ®), and displayed on an image display device by using the data in the recording medium, the image display device generally has had a difficulty in color investigation of the color image, because the sender and the receiver of the color image cannot match their colors. Color management has been contrived as a solution for the problem, and is drawing attention.

The color management ~~is for equalizing~~ equalizes differences in colors between each image display device by utilizing a common color space. In other words, color management attains an accordant expression of colors by describing all colors in a single color space, in which coordinates corresponding to the colors are accorded between colors of different devices. This is based on an idea that colors described by the same coordinates in a single color space have the same expression.

One ~~of~~ color management ~~methods~~ method commonly used today ~~is a method for correcting~~ corrects the differences between each device with a CIE-XYZ color space as the color space, and by using XYZ tristimulus values that are internal descriptive coordinates in the CIT-XYZ color space. ~~In~~ Japanese Unexamined Patent Publication, Tokukaihei No. 11-134478 (published May 21, 1999), ~~disclosed is~~ discloses a technology in which accordant color expression is achieved by ~~the~~ this method.

Figure 15 explains an environment in which each PC display image is viewed via the color management. ~~The environment, in which each PC display image is viewed with the color management, is explained referring to Figure 15. Here, a display image 152, which was displayed on a display device 151 of a PC to transfer (a sending PC), is displayed on a display device 153 of a PC to receive (a receiving PC).~~

Generally, there is a difference between the sending PC and the receiving PC, ~~in a degree as to~~ how much the color reproduction characteristics are changed with a passage of time. Moreover, the transferred image is displayed on display devices with different color reproduction characteristics, respectively, and under a condition in which an image viewing condition and an environment, such as illumination light, are varied.

AI In Figure 15, however, illumination light 154 of the sender and illumination light 155 of the receiver are ~~surely~~ varied. In this case, expression of an image is varied in accordance with the variation in illumination light, ~~thus~~. Thus, an isochromatic sensation cannot be attained, even though the image has the isochromatic color under one of the illumination lights. Moreover, when the display device is, for example, a transmission type liquid crystal display device (a transmission type LCD), long-time continuous use of the device causes a change in color filter characteristics with passage of time, and changes in a back light source due to a change in surrounding temperature and passage of time. This leads to changes in brightness and color of the displayed objects. Therefore, it has been a problem that long-time continuous use, which causes a far greater change in the expression of the image, cannot have an isochromatic sensation.

~~Meanwhile, image~~ Image display devices equipped with a reflection type liquid crystal display device (a reflection type LCD) ~~has~~ have been popularized for portable information terminals and PCs. Because its display theory is based on reflection of external light (light from the exterior of the device, ~~thus from surrounding~~) such as illumination light, the reflection type LCD is affected more significantly by the external light in terms of display quality, compared to the transmission type LCD. Broadly

speaking, two reasons, which are ~~listed~~ discussed below, ~~can be given for explaining~~ explain the above characteristics of the reflection type LCD.

~~To begin with, a~~ A first reason is ~~discussed here, explaining involves~~ the fundamental theory of the reflection type LCD for displaying an image, ~~referring~~ understood with reference to Figure 16.

Figure 16 shows an example in which a reflection type LCD is used as a display device of a notebook-sized PC. Illumination light A strikes ~~onto a~~ reflection type LCD 161, ~~and emitted out is~~ which emits light modulated by a color filter or a liquid crystal. The emitted light is denoted B. A user 162 of the image display device views the emitted light B. Needless to say, a change in the emitted light B gives the user 162 a feeling that image quality is changed.

41  
Next, ~~Figures 17A-17E show~~ shows examples of various characteristics, ~~where in~~ which the horizontal axis of abscissas is wavelength of light, and the vertical axis of ordinate is relative intensity of light. For example, if the illumination light A in Figure 16 had characteristics shown in Figure 17A, while light modulation characteristics of the reflection type LCD are characteristics shown in Figure 17B, the emitted light B in Figure 16 would be described as shown in Figure 17C, that is, as a product of the characteristics shown in Figure 17A and those shown in Figure 17B, where the product is calculated per wavelength. ~~Here, the~~ The emitted light B in Figure 16 is changed ~~to as~~ shown in Figure 17E in accordance with a change of the illumination light A in Figure 16 to be as shown in Figure 17D. Moreover, the above-mentioned characteristics are discussed with reference to Figure 18. Figure 18 is a CIExy chromaticity diagram, in which indicates chromaticity coordinates of the emitted light B in Figure 16 described in Figure 17C. Meanwhile, x in Figure 18 indicates chromaticity coordinates of the changed emitting light B shown in Figure 17E. Thus, the user 162, viewing the emitted light B, feels that the displayed color is changed from to x simply by a change in the illumination light A, and thus senses that the image quality is changed.

Next, ~~a~~ A second reason is ~~discussed herein~~ involves. ~~Human~~ human vision, ~~which system~~ has characteristics to adapt to color of illumination light. Therefore, the reflection type liquid crystal, which displays an image by using illumination light as its lighting source, needs to take the adaptation characteristics of humans in consideration for displaying. Otherwise, a change in the image quality is noticed.

A1  
The change of the displayed color from to x in Figure 18 is due to the change of the illumination light A from the light with the characteristics shown in Figure 17A to the light with the characteristics shown in Figure 17D. In most cases, the user 162 of Figure 16 views the LCD under this illumination. In other words, he adapts to the illumination light A. A change of the illumination light in Figure 17A into that in Figure 17D indicates that the adaptation condition is also changed.

Thus, a human cannot sense precisely the change of the displayed color from to x in Figure 18, which is caused by the change in the illumination light. For example, the user 162, who senses a color of in Figure 18 under the illumination light in the Figure 17A, feels that a color of x in Figure 18 looks like a color of in the Figure 18, because the adaptation condition is varied with a change of the illumination to be as shown in the Figure 17D.

In any case, a change in the illumination (external light) gives the user 162 a sensation that the image quality of the LCD ~~is varied~~ varies.

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*Please amend the paragraph beginning at page 11, line 4, as follows:*

A2  
Figures 17A-17E ~~are~~ is an explanatory views showing a color change of the reflection type LCD.

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*Please amend the paragraphs beginning at page 12, line 3 through line 20, as follows:*

A3  
Explained below is an embodiment of the present invention. Note that, an LCD is used as an illustrative example of an image display device in the present embodiment.

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As shown in Figure 1, the ~~The~~ LCD of the present embodiment is provided with, ~~as shown in Figure 1,~~ a sensor 4 for sensing light characteristics of external light (illumination light: hereinafter, referred to as external light condition), ~~a~~. A target display color setting section 6 ~~for setting~~ sets a color to display in accordance with an output of the sensor, ~~and a~~. A color reproduction section 7 ~~for displaying~~ displays the set target display color by using three primary colors in arbitrary chromaticities. A chrominance signal converter is structured with the target display color setting section 6 and the color reproduction section 7.

Note that, in Figure 1, ~~denoted by 1 is~~ also shows a liquid display panel 1 (an image display section) and ~~referred to as 5 is~~ a signal input terminal 5.

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*Please amend the paragraph beginning at page 13, line 4 through page 15, line 22, as follows:*

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The following description explains actions of the respective sections. The LCD panel 1 is a display panel with ability to perform color display, ~~in which a color~~. Color can be ~~is~~ expressed, for example, by a combination of three primary colors: red, green and blue (hereinafter, referred to as RGB, respectively). The target display color setting section 6 is a section for determining by calculation what is the preferable color ~~in which displayed is~~ for displaying a signal ~~to~~ input into the signal input terminal 5, considering chromatic adaptation of the human vision system to illumination light.

14  
The following is a brief explanation ~~on~~ of the chromatic adaptation of human vision system. The chromatic adaptation indicates such characteristics of vision system that sensitivity characteristics of vision system vary in accordance with the illumination in such a manner that visual information can be obtained without significant effect of a change in the illumination light. When moving from the indoors (with illumination by a fluorescent lamp) to outdoors (with a glow of the setting sun), the entire sight is sensed in reddened colors for a moment. But, gradual restoration of normal color perception takes place until ~~regaining~~, in the end, a color perception is regained which is almost equivalent to the color perception in ordinary time. This is because the sensitivity characteristics of

the vision system are changed from a status adapting to the fluorescent lamp to a status adapting to the glow. However, the restored color perception in the end cannot be perfectly identical with the previous color perception. Thus, residual error remains.

The target display color setting section 6 forecasts such a change of the adaptation status, then finds out in advance a color to display in order to make a user ~~perceives~~ perceive a right color (hereinafter, such a color is referred to as a corresponding color) without the residual error. Such calculation can be performed by using von Kries's chromatic adaptation model, for example.

AM The following is a detailed explanation on the color calculation by employing the von Kries's model. The von Kries-assumed model assumes that, in order to find the corresponding color, that eyes have sensors with different spectral sensitivities, respectively, and corresponding to the three primary colors, red, blue and green, as shown in Figure 2. The energy vs. wavelength graphs of Figure 2 indicate ~~Shown in Figure 2~~ are (1) ~~graphs (graphs in middle) for indicating~~ relative intensity of energy with respect to wavelength of respective light, where sunlight and a incandescent lamp are discussed, and (2) ~~graphs (~~ The graphs in at a right-hand side) for explaining of Figure 2 explain sensitivity balance of the eyes with respect to the respective light by showing relative sensitivity with respect to wavelength of the light. According to a change in spectral distribution of the illumination light, the sensors change their sensitivities so that expression of white is constant. ~~von~~ Von Kries defined this as the chromatic adaptation system.

For example, as in the above Figure 2 example where the illumination is changed from the daylight to the incandescent lamp, spectral distribution of the daylight is flat, as a whole. Therefore, the sensitivities of eyes for red, blue and green are well-balanced. However, the incandescent lamp has an intense red color component with a feeble blue color component. Thus, the sensitivity of the red sensor of the eyes is decreased, while the sensitivity of the blue sensor is increased. As a result, a constant response to white is achieved any time, resulting in no change in color expression.

*Please amend the paragraph beginning at page 16, line 21 through page 17, line 4, as follows:*

AS  
Hence, use of the von Kries's model can find which color should be displayed for attaining color expression as expected in a particular adaptation status, by referring to tristimulus values of light to which the human vision system is adapting. The calculation using the von Kries's model is explained above, but the present invention is not limited by this.

*Please amend the paragraph beginning at page 19, line 19 through page 20, line 3, as follows:*

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In the series of ~~the equation~~ equations, all the ~~calculation~~ calculations can be performed perfectly if the tristimulus values of the illumination light are available, ~~while the~~. The tristimulus values of the illumination light can be determined easily by using the integral equation shown in Equation 8 if the wavelength distribution of the illumination light is known. Therefore, the tristimulus values can be determined by grasping the wavelength characteristics of the illumination light by using the sensor.

*Please amend the paragraph beginning at page 20, line 8, as follows:*

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Because the relationship between RGB and XYZ can be converted by a simple linear matrix, by determining the matrix one can find which corresponding color is expressed by which types of conversion of RGB signal of the chrominance signal inputted into the signal input terminal 5.

*Please amend the paragraph beginning at page 21, line 1, as follows:*

AB  
Next, ~~the~~ The color reproduction section 7 is explained below. Considering changes in the chromaticities of three primary colors due to various reasons, the color

AG reproduction section 7 carries out a process for displaying the color set by target display color setting section 6, by using three primary colors after the changes.

*Please amend the paragraph beginning at page 22, line 5, as follows:*

AM This process is carried out as follows. First, the chromaticity coordinates of the three primary colors are determined, then ~~the a~~ matrix is determined for displaying an arbitrary color rightly by using the three primary colors having the chromaticity coordinates. Subsequently, the output of the target display color setting section 6, which was determined before, is multiplied by the matrix.

*Please amend the paragraph beginning at page 23, line 1, as follows:*

AM/10 ~~Next, a method of determining~~ Determining the matrix for displaying the arbitrary color rightly by using three primary colors of certain chromaticity coordinates. ~~The calculation~~ can be carried out quantitatively with respect to colorimetry. ~~Here, a~~ A detailed explanation on the theory is omitted, ~~and since, e.g.,~~ programs written in C language are shown in Figures 19 to 24. Figure 19 shows a setting portion of a converting program with respect to the chromaticity coordinates. Figure 20 shows a portion of a program for calculating z from x and y. Shown in Figure 21 is a portion of a program for calculating a matrix. In Figure 22, a portion of a program for calculating a matrix and an inverse matrix is shown. Figure 23 shows a portion of a program for carrying out a calculation for normalization. Given in Figure 24 is a portion of a program for showing results of those calculation.

*Please amend the paragraphs beginning at page 24, line 21 through page 25, line 11, as follows:*

AM/1 The sensor 4 is for measuring the wavelength characteristics of the light illuminating the LCD. The sensor 4 measures the wavelength characteristics of the light, which strikes onto the LCD and has wavelength characteristics to ~~resolve~~ resolve into at



least more than two different wavelength regions, then the sensor 4 outputs the chromaticity coordinates values of the light.

AN The sensor 4, as shown in Figure 4, can be easily realized by equipping a silicon blue chip 43 with a color filter 42, which is necessary. Note that, 44 is an output terminal. The sensor may be attached externally to the LCD, as shown by sensor 51 in Figure 5, or assembled in pixels of the LCD, as described in Figure 6.

*Please amend the paragraphs beginning at page 25, line 20 through page 26, line 11, as follows:*

A12 In either of the cases, the wavelength regions to ~~resolute~~resolve may be, for example, wavelength regions corresponding to the RGB, or wavelength regions corresponding to cyan, magenta and yellow (hereinafter, referred to as C, M, Y, respectively). Further, the wavelength regions may be wavelength regions in which visible light range is sampled at an adequate interval, for example, every 100nm, and intensity of the light in the region is outputted.

By the way, ~~the a sensor of this the kind, which is installed~~ as shown in Figure 5, for example, should be able to detect light that is peripheral light and actually reaches the eyes of a user after ~~reflected~~reflection by the liquid crystal in the liquid crystal display panel, ~~as detection of the other panel.~~ Detection of peripheral light striking onto the liquid crystal, but not reaching to the eyes, is not necessary.

*Please amend the paragraphs beginning at page 27, line 5 through page 27, line 21, as follows:*

A13 ~~Note that,~~ The effective reflection range of incident light shown by the circular cone 252 is determined depending on the type ~~types~~ of the reflection type liquid crystal which is employed.

Hence, the sensor is given sensitivity distribution characteristics ~~as which are~~ same as the circular cone 252. This makes it possible for the sensor to detect effectively ~~by the~~

113  
~~sensor to find which the~~ type of light which is reflected by the reflection type liquid crystal panel 251 and actually sensed by the eye 253 of the user. Other light, which is not reflected by the liquid crystal, is not detected by the sensor, ~~while so that~~ the sensor does not evaluate the light which cannot actually reach the eye 253 of the user.

This has such an advantage that only light, which actually reaches the eye 253 of the user, can be utilized in the system.

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*Please amend the paragraph beginning at page 28, line 3, as follows:*

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114  
As discussed above, in the present invention, by using the two matrices, the inputted signal is converted based on the characteristics of the illumination light obtained by the sensor 4. Then, ~~then~~ the corresponding color, which is suitable for human viewing and adapted to the illumination condition, is determined. The corresponding color is displayed by using the three primary colors under the influence of the illumination. This presents colors agreeable with the condition to which the vision system of the user is adapted. This, ~~thus~~ has such an advantage that color balance sensed by the user is improved. ~~Moreover,~~ Without this advantage, viewing a display with colors disagreeable with the adaptation condition of the vision system imposes an unnecessary burden to the vision system, thus ~~causes~~ causing eyestrain. The present invention, in which an image is displayed considering the adaptation condition, can provide an image that does not impose the burden to eyes, thus which is a natural and eyestrain-free image.

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*Please amend the paragraphs beginning at page 29, line 20, through page 33, line 16, as follows:*

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115  
Block diagrams of ~~another other~~ arrangements of ~~these~~ are shown in Figures 7 and 8. In Figures 7 and 8, the same numbers as in Figure 1 are given to corresponding

sections. Needless to say, either of display devices can have far better color display by using both the target display color setting section 6 and the color reproduction section 7.

The ~~far better arrangement is the preferred~~ arrangement shown is in Figure 1. In Figure 1, the sensor 4 senses the light characteristics of the illumination light, and the color to display the output of the sensor 4 is set by the target display color setting section 6. ~~The, then, the~~ target display color that has been set as such is introduced into the color reproduction section 7, which renders a display displays by using the three primary colors having arbitrary chromaticities, so as to find the color conversion matrices (the color conversion coefficients) for the respective three primary colors. Subsequently, the matrix calculations are executed twice in sequence according to the signal inputted into the signal input terminal 5, thereby accomplishing this function. In the arrangements shown in Figures 7 and 8, the arrangements are so simplified that the matrix calculation is carried out only once.

AKS  
In other words, for an image display device shown in Figure 7, only a target display color setting section 6 is provided as a chrominance signal converter. In this chrominance signal converter, a target display color setting matrix, which is suitable with the output of a sensor 4, is generated by a target display color setting matrix generator 32 at the target display color setting section 6, and a signal (a chrominance signal) transmitted from a ~~single~~ signal input terminal 5 is converted by a target display color correction section 22, based on the target display color setting matrix.

Moreover, in an image display device shown in Figure 8, only a color reproduction section 7 is provided as a chrominance signal converter. In this chrominance signal converter, a color reproduction matrix, which is suitable with the output of the sensor 4, is generated by a color reproduction matrix generator 31 at the color reproduction section 7. A, ~~and a~~ signal (a chrominance signal) transmitted from a signal input terminal 5 is converted by a color converter 21, based on the color reproduction matrix..

In the present embodiment, the transmission type LCD and the reflection type LCD are given as ~~example~~ examples for explanation. However, ~~it the invention~~ is not limited to ~~those~~ these, and it may be employed generally for display devices, for example, of Cathode Ray Tube (CRT) display devices, Electroluminescence (EL) display devices, and a ~~plasma~~ plasma display devices. Moreover, it may be widely applied for electronic apparatuses equipped with those image display devices, such as a notebook-sized PC, a desk-top PC, a monitor, a projection television, a direct vision television, a video camera, still camera.

[Second Embodiment]

Another Embodiment of the present invention ~~is explained below. It should be noted that a method of~~ involves correcting a chrominance signal without using a sensor ~~is explained in the present embodiment.~~

With respect to ~~tristimulus values of illumination light, simple~~ Simple identification of the tristimulus values of the illumination light is possible when types of common illumination and their tristimulus values are stored in advance and the illumination condition at the time is selected by a user. For simple equalization of colors, it is easier to store chromaticity coordinates values of the illumination light, rather than to store the tristimulus values. It is explicit that this kind of arrangement can be opted, too.

In order to realize the above processes, an LCD of the present embodiment, as shown in Figure 9, is provided with a memory 41, which stores in advance the characteristics of the illumination light determined by the sensor 4 discussed in the first embodiment. The information stored in the memory 41, ~~is called out~~ is fetched by a user via a relevant interface (not shown) at anytime if and as necessary.

In the LCD with the arrangement of Figure 9, wavelength characteristics of the illumination light is stored in the memory 41. The user selects a keyword, such as a fluorescent lamp, an electric lamp, or outdoors, so that wavelength characteristics in accordance with the selection are outputted.

A15  
Moreover, as shown in Figure 10, a sensor 4 may also be used ~~together~~ so that output of the sensor 4 and the output of the memory 41 can be used alternatively, ~~in accordance with needs as needed~~. The switchover of the outputs is conveniently performed by using a switchover switch 101. ~~In this case, convenience is improved by the switchover, for example, in which the~~ The output of the memory 41 ~~is~~ may be used when the device is regularly used in an office, while the output of the sensor 4 ~~is~~ may be applied when the device is used ~~in the~~ outdoors under a condition where the illumination condition ~~is varied~~ varies from time to time.

*Please amend the paragraphs beginning at page 34, line 26, as follows:*

Still ~~another embodiment of the present invention is discussed below. Noted that, in the present~~ In the third embodiment, as ~~discussed in the first embodiment~~, two matrix calculations are carried out consequently, and two matrices necessary for calculations are determined ~~by calculations in advance~~. ~~In Figure 13, shown is~~ shows an example of an arrangement of an LCD of the ~~present~~ third embodiment.

A16  
The LCD shown in Figure 13 is provided with a matrix generator 3 and a calculation section (color correction section) 2 as a chrominance signal converter. The matrix generator 3 calculates two matrices in accordance with an output of a sensor 4, while products of the matrices are determined in advance by a multiplier 131 and an RGB signal of a chrominance signal is multiplied by the products by a target display color correction section 22 in the calculation section 2. Conventionally, it was necessary to execute color conversion calculations on a regular basis while an image ~~is~~ was displayed. However, in the present way, matrix calculations, which ~~was~~ were conventionally necessary to be carried out twice ~~consequently on the~~ a regular basis, can be accomplished only one time. Thus, ~~through top of~~ throughout the entire device is improved ~~thereby~~.

~~Note that, it is explicit that~~ In the third embodiment, it is no longer needed not necessary to have two sections for finding the matrices, ~~and as~~ the two sections can be

integrated into one section. Moreover, ~~it is obvious that~~ the sensor 4 shown in Figure 13 can be replaced with the memory 41 discussed in the second embodiment, arrangement as ~~An arraignment of this kind is shown in Figure 14. In those cases (the cases of the~~ devices shown in Figures 13 and 14), the arrangements are simplified ~~and their with~~ appealing utility ~~can be appealed to users. Especially for the image display device shown in Figure 14, where the memory 41 and the target display color correction section 22 are included in an interior of the chrominance signal converter 2, it is possible to store the necessary matrices themselves in the memory 41, thus the device can have a significantly simple arrangement.~~

[Fourth Embodiment]

~~Yet another~~ A fourth embodiment of the present invention is explained in the following.

~~In the present embodiment, discussed is~~ involves a method of judging whether an LCD is located indoors or outdoors (indoor/outdoor judgement).

*Please amend the paragraphs beginning at page 37, line 3, through page 39, line 12, as follows:*

In general, a reflection type display device can be used with no problem in a very bright place where an ordinary flat panel display device cannot be used, such as outdoors with direct sunlight, ~~where an ordinary flat panel display device cannot be used~~. In an outdoor environment, compared to an indoor environment, significantly large tube surface illuminance is obtained. Therefore, it is possible to judge whether or not the device is being used in the outdoor environment, ~~only~~ by measuring the illuminance by using the sensor 4 ~~shown~~ (shown in Figure 5-5) for judging whether the illuminance is significantly large. In other words, use of a single sensor can judge whether the device is in the outdoor environment or in the indoor environment. Hence, when it is judged that the device is in the outdoor environment, the correction system can be utilized, by

employing the method of the second environment, supposing sunlight illumination is given.

This simplifies the sensor, and, at the same time, ~~can structure~~ provides a highly practical and effective system, by utilizing most remarkable characteristics of the reflection type display, that is, ~~an ability to be used~~ utility in a very bright environment. ~~Especially Indoor/outdoor judgment is especially helpful~~ when the device is used in a vehicle, where it is necessary to deal with a wide range of illumination conditions. For, ~~for example, in a vehicle, conditions may vary~~ from a very bright environment to an environment similar to the indoor environment, or an environment of night driving. The indoor/outdoor judgment, ~~this makes it possible to perform~~ provide a display suitable for the respective ~~situations~~ situations, for example, by switching on a supplementary illumination light during night driving, and judging the very bright environment as a condition with direct sunlight striking onto the display.

AM  
In order to solve the above problems, an ~~An~~ image display device of the present invention, in order to solve the above problems, includes an image display section for displaying an image in accordance with an input of a chrominance signal, and a chrominance signal converter for converting the chrominance signal to be inputted into the image display section, in accordance with light characteristics of external light that strikes onto the image display section.

~~Here, the~~ The external light does not indicate a back light installed in an interior of the image display section, but denotes light from a light source locating in an exterior of the image display section, such as sunlight and a fluorescent lamp. In general, when an image displayed on the image display section is viewed by a user, the tint of the image appears to be varied, depending on types of the external light striking the image display section. Hence, the chrominance signal, which is to be inputted into the image display section, may be corrected for every type of ~~the~~ external light, in order that the image, which looks differently for every type of the external light, appears with a consistent similar tint, ~~constantly~~.

A17  
Moreover, the types of ~~the~~ external light can be identified by detecting the light characteristics of the external light. Typical light characteristics are wavelength characteristics that can be used for an easy identification of the external light.

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*Please amend the paragraph beginning at page 55, line 1, as follows:*

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A18  
Regardless of use in the outdoors or the indoors, this allows the chrominance signal to be corrected in accordance with the illuminance of the external light striking onto the image display section. Thus, it is possible to provide an image always in the color suitable for the user, while not affected by the light characteristics of the external light.

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